

Please amend the following claims:

a1
8. (Amended) A purified nucleic acid sequence encoding the sodium channel protein [of claims 1-7] selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6 and SEQ NO:8 or a complementary strand thereof.

Sub D2
13. (Amended) A vector comprising a nucleic acid sequence of [claims 8-12]
claims 8, 9, 10, 18, 19 or 20.

a2
14. (Amended) A host cell transformed or transfected with a nucleic acid sequence of [claims 8-12] claims 8, 9, 10, 18, 19 or 20.

a3
17. (Amended) A method of producing a mammalian sensory neuron sodium channel protein, wherein the sodium channel is insensitive to tetrodotoxin, comprising expressing [said protein] a nucleic acid sequence of claim 8 in a host cell transformed with [a] said nucleic acid sequence [coding for said protein].

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Please add the following new claims:

b18 18. A nucleic acid sequence of claim 9 wherein said nucleic acid sequence comprises the coding portion of the nucleic acid sequence shown in SEQ ID NO:3.

19 19. A nucleic acid sequence of claim 9 wherein said nucleic acid sequence comprises the coding portion of the nucleic acid sequence shown in SEQ ID NO:5.

a4
20. A nucleic acid sequence of claim 9 wherein said nucleic acid sequence comprises the coding portion of the nucleic acid sequence shown in SEQ ID NO:7.

21 21. A vector comprising a nucleic acid sequence of claim 18.

22 22. A vector comprising a nucleic acid sequence of claim 19.

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23. A vector comprising a nucleic acid sequence of claim 20.¹⁴

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24. A host cell transformed or transfected with a nucleic acid sequence of claim 18.^b

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25. A host cell transformed or transfected with a nucleic acid sequence of claim 19.¹⁰

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26. A host cell transformed or transfected with a nucleic acid sequence of claim 20.¹⁴

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27. A method of producing a mammalian sensory neuron sodium channel protein, wherein the sodium channel is insensitive to tetrodotoxin, comprising expressing the nucleic acid sequence of claim 18^b in a host cell transformed with said nucleic acid sequence.

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28. A method of producing a mammalian sensory neuron sodium channel protein, wherein the sodium channel is insensitive to tetrodotoxin, comprising expressing the nucleic acid sequence of claim 19¹⁰ in a host cell transformed with said nucleic acid sequence.

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29. A method of producing a mammalian sensory neuron sodium channel protein, wherein the sodium channel is insensitive to tetrodotoxin, comprising expression the nucleic acid sequence of claim 20¹⁴ in a host cell transformed with said nucleic acid.

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30. A purified nucleic acid sequence of claim 8 which encodes the sodium channel protein of SEQ ID NO:4.

31. A purified nucleic acid sequence of claim 8 which encodes the sodium channel protein OF SEQ ID NO:6.

32. A purified nucleic acid sequence of claim 8 which encodes the sodium channel protein of SEQ ID NO:8.

33. A purified nucleic acid sequence of claim 8 which encodes the sodium channel protein of SEQ ID NO:2. --

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